SECTION I

Manufacturer's flame:

Emergency Telephone No:

The Ensign-Bickford Company

Product Information: 1-860-843-2276

**CHEMTREC**: 1-800-424-9300

Address:

660 Hopmeadow St., Simsbury, CT 06070

Hwy. 175 P.O. 160, Graham, KY 42344

Chemical Name and Synonyms:

Trade Name and Synonyms:

**PRIMACORD®** 

DETONATING CORD,

PRIMALINE®

Cage Code:

N/A

EBCo Product Code:

96336

A305-A993 AM382-AM990

SECTION II - HAZARDOUS INGREDIENTS				
ingredient:	C.A.S. No.	OSHA PEL	ACGIR TLV	
Pentaerythritol Tetranitrate (PETN)	78-11-5	None	None	
Cyclotrimethylane Trinitramine (RDX)	121-82-4	None	1.5mg/m³ (skin)	
Cyclotetramethylene Tetranitramine (HMX)	2691-41-0	None	None	
2,5-Bis(Picrylamino)-3,5- Dinitropyridine (PYX)	38082-89-2	None	None	
Ammonium Hydroxide	1336-21-6	None	None	

#### MATERIAL SAFETY DATA SHEET

Cellulose	9004-34-6	15mg/m² (total) 5mg/m² (resp)	Page 2 of 5 10mg/m <sup>3</sup>
Triburyl Phosphate	126-73-8	5mg/m³	2.2 <b>m</b> g/m³
Polyethylene	9002-88-4	None	None
Cotton Yarn	N/A	None	None
Polypropylene Yarn	N/A	None	None
Wax	N/A	None	None

### SECTION III - PHYSICAL DATA

Boiling Point:

N/A

Specific Gravity:

N/A

Vapor Pressure:

Percent Volatile:

N/A

Vapor Density:

N/A

Evaporation Rate:

PETN: 140° C

Solubility in Water:

PETN:

Insoluble

(Soluble In Acetone)

RDX:

PYX:

Insoluble

Insoluble

HMX:

Insoluble

RDX: PYX:

Melting Point:

190°-200° C Decomposes

370° C

HMX: 275° C Decomposes Violently

Appearance and Odor:

PETN: Odorless White Crystalline Solid

RDX:

White Granular Powder

PBX:

Odorless Yellow Crystalline Solid

HMX: White Granular Solid, Methanol Odor

Product Appearance:

The core of high explosive is wrapped in plastic yarn. The core will contain 4 to 400

GR./Ft. of any of the listed explosives. Brightly colored rope like (lexible) linear product with a jacket of braided plastic yarn.

### MATERIAL SAFETY DATA SHEET

Page 3 of 5

SECTION IV - FIRE AND EXPLOSION HAZARI) DATA

Elash Point: N/A

Exposure Limits:

LEL: N/A

UEL: N/A

Special Fire Fighting

Procedures:

DO NOT FIGHT FIRES INVOLVING EXPLOSIVES.

ISOLATE THE AREA. EVACUATE PERSONNEL TO A SAFE

PLACE. EXPLOSIVE DETONATION CAN OCCUR.

Extinguishing Media:

Do not fight fires involving explosives. Water may be applied through a fixed extinguishing system (sprinklers) as long as people need not be

present for the system to operate.

Unusual Fire and

Explosion Hazards:

May detonate if exposed to shock, heat, impact, sparks or friction.

Nitrogen oxides are released when the product is burned

Auto Ignition Temperature:

PETN: 190° C

RDX: N/A

PYX: N/A

HMX: Deflagrates @ 287° C

# SECTION V - ROUTES OF ENTRY EFFECTS OF OVER EXPOSURE

Eyr Contact:

PYX is a known eye irritant. Flush immediately with running water

for at least 15 minutes. Seek medical attention.

Sion Contact:

Wash thoroughly with soap and water if skir. irritation occurs; seek

medical attention

Inhalacion:

PETN can lower blood pressure. PETN is a vasodilator. If detonation fumes are inhaled remove victim to fresh air. If not breathing, give artificial respiration; seek medical attention.

Breathing RDX dust can cause spasms, card ovascular collapse, nasal

and respiratory irritation. Seek medical attention.

Logestion:

HMX is poisonous by ingestion; seek medical attention. Ingestion of

RDX is to be treated with gastric wash. Death can occur from the

ingestion of RDX.

### SECTION VI-EMERGENCY FIRST AID PROCEDURES

### MATERIAL SAFETY DATA SHEET

Page 4 of 5

Eye Contact:

Flush using running water for 15 minutes. If irritation persists, seek

medical attention.

Skin Contact:

Wash thoroughly with soap and water. If skin irritation occurs, seek

medical attention.

Inhalation:

Remove victim to fresh air. If not breathing administer artificial

respiration. Seek medical attention.

Ingestion:

Seek medical attention. Treat ingestion of RDX with gastric wash.

SECTION VII- REACTIVITY DATA

Stability:

Stable

Conditions To Avoid:

Detonating Cord may detonate if exposed to sufficient heat, shock,

friction, impact and static charge.

Incompatibility:

Incompatible with acids, alkalis.

Hazardous Decomp

Products:

Detonation and burning will produce nitrogen oxides. Avoid

breathing the fumes from detonation and burning.

Hazardous

Polymerization;

Will not occur.

SECTION VIII - SPIELS OR LEAK PROCEDURES

Steps To Be Taken In Case Material is Released

or Spilled:

Review Fire and Explosive Hazards and Safety Precautions before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up. Isolate the spill area; removing all sources of ignition from the location. Carefully collect the spilled material and place in a (Velostat) conductive bag. Contamination of this material with sand, grit or dirt will render the material more sensitive to detonation. If safe; separate material that is not contaminated from contaminated material. "Loose" powder spills should be wetted down and cleaned using a damp rag or sponge. Store all collected material in a secure area, to await proper

disposal.

Only qualified personnel should perform any clean-up and disposal of material.

### MATERIAL SAFETY DATA SHEET

Page 5 of 5

Waste Disposal Method:

Waste Detonating Cord is classified as a hazardous waste with the characteristic of reactivity. EPA Hazardous Waste Number D003. Any such waste should be handled in accordance with local, state and federal regulations. The current-preferred methods of destruction of such waste are open burning or open detonation. Ensure that Detonating Cord contains no knots or kinks. Knots or kinks in Detonating Cord can cause a detonation when subject to heat/flame. All destruction is to be performed by qualified personnel at a licensed (TSD).

SECTION IX - SPECIAL PROTECTION INFORMATION

Respiratory Protection:

OSHA/NIOSH approved dust, mist and fume filter respirator.

Yentilation:

Product is intended for outside use and for use in underground mines. Ventilation should be provided if used in underground mines or if any

special testing is to be performed indoor.

Protective Gloves:

Protective gloves of rubber or Neoprene should be worn

Eye Protection:

Safety glasses

Other Protection:

N/A

SECTION X - OTHER PRECAUTIONS

Precautions To Be Taken

in Handling and Storage:

Transportation and storage must be in accordance with local, state and

federal regulations. Store away from sparks or other ignition sources.

Avoid heat, shock and impact.

Other Precautions:

Refer to Manufacturer's Instructions and Warnings supplied with

product.

SARA 313 Information:

This product does not contain any chemical that is subject to the

reporting requirements of SARA Title III; Section 313.

Data Sheet Prepared By: Edwin J. Zalewski

Last Data Sheet Revision: 10/30/95